

## Original Article

### Assessment of patient with nasal foreign bodies: An observational study

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#### ABSTRACT:

**Background:** The present study was conducted for assessing patients with nasal foreign bodies. **Materials & methods:** A total of 50 patients who reported with nasal foreign bodies were enrolled in the present study. Complete demographic and clinical details of all the patients was obtained. A Performa was made and type of nasal foreign bodies was recorded. Assessment of results were done by SPSS software. **Results:** A total of 50 patients were analysed. Mean age of the patients was 11.3 years. 44 percent of the patients belonged to the age group of less than 10 years. 36 percent of the patients belonged to the age group of 11 to 20 years. out of 50 patients, 32 were males and 18 were females. Button, peas, chalk and nuts were type of nasal foreign bodies found to be present in 24 percent, 20 percent, 26 percent and 20 percent of the patients respectively. **Conclusion:** It can be concluded that the combination of obtaining a thorough medical history, unexplained nasal symptoms and through examination can help to treat patients with NFB.

**Key words:** Nasal, Foreign bodies

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#### INTRODUCTION

Nasal foreign bodies (NFBs) are commonly encountered in emergency departments. Although more frequently seen in the pediatric setting, they can also affect adults, especially those with mental retardation or psychiatric illness. Children's interests in exploring their bodies make them more prone to lodging foreign bodies in their nasal cavities. In addition, they may also insert foreign bodies to relieve preexisting nasal mucosal irritation or epistaxis. As benign as an NFB may seem, it harbors the potential for morbidity and even mortality if the object is dislodged into the airway.<sup>1-3</sup> Nasal foreign bodies may result from the abundant availability of tiny objects in our society and a curious child exploring his or her nasal cavities. An inserted object that is not witnessed or retrieved can remain relatively asymptomatic or cause local tissue damage and potentially yield more serious consequences.<sup>4-5</sup> Hence; under the light of above obtained data, the present study was conducted for assessing patients with nasal foreign bodies.

#### MATERIALS & METHODS

The present study was conducted for assessing patients with nasal foreign bodies. A total of 50 patients who reported with nasal foreign bodies were enrolled in the present study. Complete demographic and clinical details of all the patients was obtained. A Performa was made and type of nasal foreign bodies was recorded. Assessment of results were done by SPSS software.

#### RESULTS

A total of 50 patients were analysed. Mean age of the patients was 11.3 years. 44 percent of the patients belonged to the age group of less than 10 years. 36 percent of the patients belonged to the age group of 11 to 20 years. out of 50 patients, 32 were males and 18 were females. Button, peas, chalk and nuts were type of nasal foreign bodies found to be present in 24 percent, 20 percent, 26 percent and 20 percent of the patients respectively.

**Table 1: Age-wise distribution of patients with nasal foreign bodies**

Age group (years)	Number	Percentage
Less than 10	22	44
10 to 20	18	36
21 to 30	5	10
31 to 40	3	6
More than 40	2	4
Total	50	100
Mean	11.3	

**Table 2: Gender-wise distribution of patients with nasal foreign bodies**

Gender	Number	Percentage
Males	32	64
Females	18	36
Total	50	100

**Table 3: Type of nasal foreign bodies**

Type of nasal foreign body	Number	Percentage
Button	12	24
Peas	10	20
Chalk	13	26
Nuts	10	20
Others	5	10

## DISCUSSION

Foreign bodies are a rather common problem, specially in otolaryngology, being frequently followed by complications, some with significant severity. The first years of a child's life represent a phase of exploration and interaction with the environment. When they start moving by their own means (crawling and walking), the child starts having access to a number of objects that have to be duly explored. This process encompasses, amongst other things, the placement of objects in orifices, such as the ears, nose and throat. Parent's laxness and lack of attention, leaving small objects at the child's reach and not properly watching over them, much contributes to this high incidence of foreign bodies. Ears, noses and throats are the most exposed orifices, hence the high incidence of foreign bodies in them. In adults we may have cases which were inflicted on purpose or accidentally, the former being rarely seen in the nasal cavities on patients without psychiatric disorders. The accidents are mostly caused by insect that penetrate the nasal cavities or, even more rare, shifting of foreign bodies from mouth and hypopharynx to the back of the nose.<sup>6-9</sup>

A total of 50 patients were analysed. Mean age of the patients was 11.3 years. 44 percent of the patients belonged to the age group of less than 10 years. 36 percent of the patients belonged to the age group of 11 to 20 years. out of 50 patients, 32 were males and 18 were females. A retrospective study of FB associated injuries by Gregori D et al, assessing the characteristics of the injured child and the FB, the circumstances of the accident and finally the hospitalization details took place on children aged 0-14 in major hospitals of 19 European countries. In total

688 cases were assessed. Complications and hospitalization occurred in 59 and 52 cases, respectively. Over 51% of patients were females. The median age of children who experienced a complication was four years. In the majority of cases FB removal was accomplished by means of a non-invasive technique (rhinoscopy with a nasal speculum or rigid fiberoptic endoscope). The majority of children were directly referred to the ENT department. The most common FBs associated with complications and hospitalization were nuts, seeds, berries, corn and beans, batteries and other inorganic objects such as broken parts of pens, paper clips and pearls. Over 38% of the injuries occurred under adults' supervision. FB injuries in the nose are commonly encountered in clinical practice.<sup>9</sup>

Button, peas, chalk and nuts were type of nasal foreign bodies found to be present in 24 percent, 20 percent, 26 percent and 20 percent of the patients respectively. In another similar study conducted by Claudet I et al, authors analysed the patients with nasal foreign bodies (NFB). A total of 388 patients were included (393 NFB). The annual mean number of cases was 68. The annual distribution showed a higher number in January, March, April, and October following Christmas, Easter and Halloween celebrations, totaling 40% of all NFB admissions. The sex-ratio was 0.95. Children aged less than 4 years accounted for 71% of the studied population. The mean age was 3.5+/-1.6 years (range, 1.4-13 years). The majority of accidents occurred at home (95%). The length of time spent in the PED was 78+/-57 min. The NFB duration of insertion was unknown in one-quarter of cases, present for less than 4 h in 65% of cases. No symptoms were described in most cases

(88%). When symptoms were described, bleeding, pain or nasal discomfort, and foul nasal odor were the principal symptoms. The right nostril was the predominant location (60%). This difference tended to disappear in the group of children aged less than 4 years. Five children had bilateral NFB. Nonorganic compounds accounted for 80% of the NFB: plastic beads or balls (39%), plastic or toy parts (20%), stones or pebbles (11%), and paper (6%). The extraction was instrumental in 82% of cases, and 26% of patients were referred to an ENT specialist when PED attempts were unsuccessful. One child needed hospitalization for extraction under general anesthesia of two beads located deep in the same nostril. No complication occurred. Five children had repeated accidents within an average delay of 6 months. Often benign, this frequent accident can be serious in case of batteries or neodymium magnet insertion: the extraction becomes an emergency because of risks of nasal mucosa necrosis and/or nasal septum perforation.<sup>10</sup>

## CONCLUSION

It can be concluded that the combination of obtaining a thorough medical history, unexplained nasal symptoms and through examination can help to treat patients with NFB.

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